

Amendments to the Claims:

1. (Currently amended) System for replicating or for replicating and expressing a sequence of interest in a plant, comprising:

- (i) a DNA precursor of an RNA replicon, said RNA replicon ~~containing components of a tobamovirus being derived from a plus-sense single stranded RNA virus~~ and comprising at least one sequence of interest, said DNA precursor of said RNA replicon containing in a replicase open reading frame (ORF) or in a movement protein ORF of said RNA replicon, one or more introns near or within A/U rich localities of said sequences derived from said RNA virus; and
- (ii) a DNA precursor of a helper replicon, wherein said helper replicon is
 - (a) incapable of systemic movement in a plant both in the presence and in the absence of said RNA replicon (i) and
 - (b) capable of expressing in a plant one or more proteins necessary for systemic movement of said RNA replicon (i),

whereby said RNA replicon (i) is capable of replicating or of replicating and expressing said sequence of interest in a plant, but unable to move systemically in a plant in the absence of said one or more proteins expressed by said helper replicon (ii).

2. (Original) The system according to claim 1, wherein said helper replicon (ii) is incapable of systemic movement in a plant due to the absence of a functional origin of viral particle assembly.

3. (Previously presented) The system according to claim 1, wherein said helper replicon (ii) is capable of expressing in a plant a coat protein and/or a movement protein necessary or useful for said systemic movement of said RNA replicon (i) in said plant.

4. (Previously presented) The system according to claim 1, wherein said RNA replicon (i) cannot express a protein necessary for systemic movement of said RNA replicon (i) in said plant.

5. (Original) The system according to claim 4, wherein said RNA replicon (i) lacks a coat protein open reading frame and said sequence of interest is larger than 1 kb.

6. (Cancelled)

7. (Previously presented) The system according to claim 1, wherein said tobamovirus is a tobacco mosaic virus.

8. (Previously presented) The system according to claim 1, wherein said RNA replicon (i) is based on a tobamovirus wherein the coat protein open reading frame is replaced by said sequence of interest.

9-11. (Cancelled)

12. (Previously presented) The system according to claim 1, wherein said precursor of said helper replicon (ii) is DNA encoding said helper replicon (ii), whereby said DNA is capable of producing said helper replicon (ii) in cells of said plant.

13. (Previously presented) The system according to claim 1, wherein said precursor of said RNA replicon (i) or said precursor of said helper replicon (ii) are carried by agrobacteria.

14. (Previously presented) The system according to claim 1, wherein the system further comprises a plant, or seeds thereof, for replicating or for replicating and expressing said sequence of interest.

15. (Previously presented) The system according to claim 1, wherein said plant is a dicot plant.

16. (Previously presented) The system according to claim 1, wherein said plant is transgenic and expresses a viral protein necessary or useful for cell-to-cell movement of said RNA replicon (i).

17. (Original) The system according to claim 16, wherein said viral protein is a movement protein of tobacco mosaic virus.

18. (Withdrawn) The system according to claim 1, wherein said RNA replicon (i) and said helper replicon (ii) lack homology in functionally overlapping regions.

19. (Withdrawn) The system according to claim 1, whereby said RNA replicon (i) and said helper replicon (ii) lack a recombination-prone homology in a region recombination in which between said RNA replicon (i) and said helper replicon (ii) would create an RNA replicon capable of expressing a protein necessary for systemic movement and capable of moving systemically in said plant.

20. (Withdrawn) The system according to claim 1, wherein the sequence homology between said RNA replicon (i) and said helper replicon (ii) in any sequence segments having at least 100 nucleotides is at most 80%.

21. (Withdrawn) The system according to claim 20, wherein said sequence segments are located downstream of the replicase ORFs of said RNA replicon (i) and said helper replicon (ii).

22. (Withdrawn) The system according to claim 1, wherein said helper replicon (ii) lacks a movement protein ORF but contains a replicase ORF and an ORF encoding a protein necessary for systemic movement of said RNA replicon (i), the latter ORF being under the control of a subgenomic promoter, said subgenomic promoter being derived from an RNA virus of a strain different from the RNA virus from which the subgenomic promoter controlling expression of said sequence of interest in said RNA replicon (i) is derived.

23. (Withdrawn) The system according to claim 1, wherein the sequence of said RNA replicon (i) and the sequence of said helper replicon (ii) do not overlap.

24. (Withdrawn) The system according to claim 1, wherein said DNA precursor of said RNA replicon (i) contains one or more introns in the replicase ORF of said RNA replicon (i).

25. (Withdrawn - currently amended) A process for replicating or for replicating and expressing a sequence of interest in a plant, comprising providing cells of a plant with

- (i) a DNA precursor of an RNA replicon, said RNA replicon ~~containing components of a tobamovirus being derived from a plus-sense single stranded RNA virus~~ and comprising at least one sequence of interest, said DNA precursor of said RNA replicon containing in a replicase ORF or in a movement protein ORF of said RNA replicon, one or more introns near or within A/U rich localities of said sequences derived from said RNA virus; and
- (ii) a DNA precursor of a helper replicon, wherein said helper replicon is
 - (a) incapable of systemic movement in said plant both in the presence and in the absence of said RNA replicon (i) and
 - (b) capable of expressing in a plant one or more proteins necessary for systemic movement of said RNA replicon (i),

whereby said RNA replicon (i) is capable of replicating or replicating and expressing said sequence of interest in said plant, but unable to move systemically in said plant in the absence of said one or more proteins expressed by said helper replicon (ii).

26. (Withdrawn) The process according to claim 25, wherein said plant is provided with said RNA replicon (i) and/or said helper replicon (ii) by transfecting with agrobacteria containing in their T-DNA said precursor of said replicon (i) and/or with agrobacteria containing in their T-DNA said precursor of said helper replicon (ii).

27. (Withdrawn) The process according to claim 25, wherein a part of said plant like a leaf is provided with said RNA replicon (i) and said helper replicon (ii) but not other parts of said plant.

28. (Previously presented) The process according to claim 25, wherein said sequence of interest is capable of replicating or of replicating and expressing systemically in parts of said plant not provided with both said RNA replicon (i) and said helper replicon (ii).

29. (Withdrawn) The process according to claim 25, wherein said plant is a dicot plant.

30-33. (Cancelled)

34. (Previously presented) System for replicating or for replicating and expressing a sequence of interest in a plant, comprising:

- (i) a DNA precursor of an RNA replicon, said RNA replicon being derived from a plus-sense single stranded RNA virus and comprising at least one sequence of interest, said DNA precursor of said RNA replicon containing one or more introns in a replicase ORF of said RNA replicon; and
- (ii) a DNA precursor of a helper replicon, wherein said helper replicon is
 - (a) incapable of systemic movement in a plant both in the presence and in the absence of said RNA replicon (i) and
 - (b) capable of expressing in a plant one or more proteins necessary for systemic movement of said RNA replicon (i),

whereby said RNA replicon (i) is capable of replicating or of replicating and expressing said sequence of interest in a plant, but unable to move systemically in a plant in the absence of said one or more proteins expressed by said helper replicon (ii).

35. (New) The system according to claim 1, wherein said RNA replicon (i) is based on, or contains components of, a tobamovirus.

36. (New) The system according to claim 1, wherein said RNA replicon (i) is based on, or contains components of, alfalfa mosaic virus.

37. (New) The system according to claim 1, wherein said RNA replicon (i) is based on, or contains components of, potato virus X.

38. (New) The system according to claim 1, wherein said RNA replicon (i) is based on, or contains components of, cowpea mosaic virus.